

Hotel Industry in this Digital World – What will the Future Bring?

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<p>Now, in 2014 it is hard to believe that once there was a life without touchscreen devices, “tweets” and “likes”, Wi-Fi or bandwidth problems. The explosion of Internet changed the entire world, speeded up the information flow and brought a new language and lifestyle into the weekdays.</p> <p>The aim of this research is to introduce these changes, the current trends and the most remarkable technological achievements and their effects, first in general then focusing on the hotel industry. Are the technological-base services more beneficial than the traditional human touch? Could technology substitute a honest smile? The answers could be found also in this paper.</p> <p>This study also introduces the findings whether a business would survive without online social networking in these days. It examines the power of social media, based on academic journals and real life experiences.</p> <p>Nobody knows exactly, what the future brings but there are certain ways to find the right direction; or is the future unpredictable? What will be the future careers? Will robots be the substitutes of human beings?</p> <p>General Managers of Restel Hotel Group in Helsinki area were asked what they thought about this digital life and what they expected from the future and the future hotel industry.</p> <p>This study is built on referred academic journals, recently published articles, reports, books, videos and own experiences.</p>	
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1 Introduction

We live in a digital world. Internet, gadgets, social media and different technological achievements constitute our everyday life. Slowly but surely we have becoming addicted to our smart phones, which determine our behaviour and communication in every aspects: in private and in working life as well.

My aim was to examine how the Internet technology and its applications are influencing our life and what kind of changes it has made in the hotel industry. An accelerated and dynamic world had been created by these digital achievements and most likely the human creativeness is unlimited and boundless as well as the technology of the 21st century. Following the newest trends and technological world in the hospitality industry is indispensable as being up-to-date is an essential element of the success.

Devices and the Internet allowed finding academic journals and articles (technological sources) without difficulties while twenty years ago we did not have this “luxury” – sometimes finding the relevant book or newspaper was a great challenge and travelling to another town to lend them from a library was not unusual either. How we could see, technology makes everything simple and timesaving, however it is not always the primary and most interesting source that could be used for getting the information about a related topic.

Besides all the theoretical findings, I also had the chance to get a comprehensive picture about the hotel operations and technological novelties due to numerous meetings with Mr Gábor Pusztai who is the Principal Correspondent of Intercontinental Hotels Group (IHG) and also the Director of Operations at Restel OY, in Helsinki Area. The Restel OY operates 49 hotels in Finland with more than 8000 hotel rooms and 240 restaurants with the variety of cuisines, serving guests with business and leisure purposes (Restel, 2014.)

Finland’s new Restel hotel – the 50th – will be opening its gate in the heart of Helsinki, on Bulevardi Street in 2015. Mr Gábor Pusztai is already in charge for the operational system of Crown Plaza Helsinki, Holiday Inn City Centre, Helsinki West and Messukeskus, furthermore the Hotelli Seurahuone and three Cumulus Hotels – Kaisaniemi, Hakaniemi and Olympia and setting up the new Hotel Indigo Bulevardi also belongs to his authority (as well as the Hotelli Meilahti which opens in 2016).

Hotel Indigo is a worldwide boutique hotel chain that always reflects the cultural and historical influence of the particular area. This will give the inspiration for the upcoming Hotel Indigo Helsinki – Boulevard as well with its 120 guest rooms, two restaurants, conference facilities, wellness and gym services. This new high standard, environment-friendly hotel will be the member of LEED programme, too (Leadership of Energy and Environmental Design), expressing the importance of the reduction of energy consumption and lowering of carbon dioxide emissions. (Restel 2013.)

I wonder, how the future hotel of Helsinki will look like, how the operational system will be set up and what kind of technological achievements will be important for the newest hotel of Helsinki and for its future customers. Mr Gábor Pusztai told me the “story” of the hotel operation, giving me “hints” about the new Hotel Indigo as well as suggestions and useful advices for the future.

A survey had been composed and sent to all the General Managers of Restel Hotels in the Helsinki area asking their opinion about this digital life and the correlation with the hotel industry as well as their expectations about the future technology. The results will be introduced at the end of this research.

By the arising of Internet, social media became a popular marketing tool among business companies – such in the hotel industry. Facebook, Twitter and Trip Advisor (etc.) have a remarkable impact on the industry and determine both of private and business life. In an experience-inspired chapter the power of social media will be introduced, as during my two-months internship at the Sales & Marketing Department of Swissôtel Tallinn I was heavily involved in social media management. During my internship I got a comprehensive picture about the Conference & Banqueting work and obtained advices, comments and knowledge from all the professionals about how to use social media as a marketing tool and how to react on feedbacks which are essential elements for today’s successful business.

After introducing the most significant elements of the digital technology, the Internet and their effects on the hotel industry of the present time, I was also wondering what the future (near and far) would bring; what the consequences of the unlimited human creativeness will be in general and how it will affect our industry. Scientific improvements of the current technologies, gadgets and machines (e.g. addition of artificial intelligence) are able to create significant changes in the future, influencing the unemployment rate for instance in that case if the hu-

man work will be automated...Should the employees of the hotel industry concern about losing their jobs? How the future hotel room will look like in 30-40 years (or maybe more) and what will be the most popular destinations in the second half of the century? This paper is also looking for the answers...

2 The World Before the Internet – The Past

2.1 Milestones of Technology

This is a world where we are *nilfing* and keep us *tweeting* busy. We upload *selfies* on an every day basis, create *blogs* but sometimes it is *TL; DR*¹. (Oxford 2013.)

Technology and Internet have changed language, dictionary and lifestyle. Now it shapes the way we live, work or think. But there has been a world existed before the Internet emerged and today's life is a result of a very long journey that started centuries ago.

The first technological achievement – the first milestone in the history – was Gutenberg's work on the printing press (1450). It made information available for a wide segment of the population and also made it spread quickly and easily. It became the achievement of preservation of knowledge; it introduced the “information revolution” like Internet today. (Kreis 2000.)

We are all grateful to I. Manzetti, A. Meucci, J. P. Reiss, E. Gray, A. G. Bell and T. Edison for their precious work on the forerunner of the telephone (1876) and then to the Hungarian inventor, Tivadar Puskás for inventing the actual telephone (Kante 2014).

The emerge of the telephone had an effect on the communication as well as the society. It became a useful tool in homes, business life and in the education. The invention of the telephone helped develop city centres and office buildings. It replaced the position of the messenger boys, telegraphers and operators. It made the world smaller and helped to keep family bonds together. (Kang 2013.)

As an interesting fact: the word “computer” was used first in 1613, although it meant something else like today. It described a human who completed calculations and computations (Computer Hope). However the product what we call computer recently was invented in 1950. It was able to store information and run a program from memory. Afterwards, the computer technology speeded up and developed constantly.

¹ New word added to Oxford Dictionary in 2013, abbrev. Means “too long; didn't read”.

According to Kante (2014) CompuServe was the first commercial Internet provider in 1969. The first email was sent in 1971 and the World Wide Web was provided to the world twenty-two years later. These data was collected from United States; Internet itself became a known phenomenon in Hungary in 1995 (26 years later) for instance (Social Daily, 2010) and became popular in education in 1998. However there are still countries around the world where the Internet is restricted or imposed prison penalties for anti-government manifestations (e.g. Turkmenistan, Vietnam, Tunisia or Cuba) and all the Gmail and Yahoo sites are constantly monitored. (Lilkty 2010.)

2.2 Technological Improvements in the Hospitality Industry – Long Ago

An article from 1995 (Hansen & Owen) predicts that technology achievements are going to be used in future hotels. They write about *smart cards* what the customer could use as a hotel room key and also mention future *kiosks* that will make possible the easy and timesaving check-ins in hotel lobbies. *Database marketing* (segmenting customers and making further profile improvements of frequent clients etc.) was a future trend twenty years ago and now these are all standard tools in the day-to-day operation in hotels. These are not just facts but also great proofs that the future *is* predictable. All these “new” achievements had the same goals twenty years ago: reducing the general and administrative expenses as well as staff requirements.

The importance of the Electronic Distribution became significant already in the 1960`s. The opportunity was given, so hotels started to follow the airlines` system and already in 1970`s travel agents, airlines and hotels were electronically connected. (Riesselman 2011.) Eight years later the first computerized bulletin board appeared which was the forerunner of Facebook and LinkedIn. However, doubts have arisen regarding technological changes: travel agents were not sure that computer is a more efficient communication channel than the telephone but gradually it became more popular in the hospitality industry. Afterwards all hotel wanted distribution systems but on a different way, thus it caused a massive inconsistency. This is the reason why HEDNA (Hotel Electronic Distribution Network Association) was founded in 1991, which is one of the most popular global forums by now. HEDNA improves and expand hospitality distribution through co-operation and knowledge sharing (HEDNA). Electronic Distribution is still developing and direct connects have a remarkable role thanks for the social media and mobile devices.

Technology has changed everything – said Michael Murphy (“a hotel industry veteran”) in an interview with Jeff Higley (2013): “Guys that would apply for franchises might sit in their cars all night counting cars at their competition to see if there was a need for another hotel.” To-day we have computers and apps, which easily give us the answers by saving time, money and energy.

3 The “Smart” Present

The title of this chapter refers to recent phenomena, to the smart devices. How the CNN points out (2014) these are all the objects around us, which enable us to being connected to the Internet 24/7 and communicate to each other due to these devices, on social media sites and different applications. This chapter gives an introduction about the everyday life in this digital world than it focuses on the hotel industry; it describes the advantages and disadvantages of the Technology-Based Self-Services and the Traditional Human Touch. I wondered what the most important technological tools are in the hotel industry recently and what the customer expects from a modern hotel room in Finland for example. Mr Gábor Pusztai shared few “secrets” about the technological achievements in the newcomer Hotel Indigo Helsinki Boulevard. Social media is an accompanied element of the Internet. The chapter will introduce the “power” of it in general than its influence on the hotel industry based on my experiences from Swissôtel Tallinn.

3.1 Everyday Life in this Digital World

Five years ago holding a touchscreen smartphone in the hand was a big issue. It was unique; it was a trend. According to the Eleven Wireless (2013) recently there are more mobile devices on the Earth than people. Smartphones represents 50% of the new mobile devices being purchased and this number is just getting higher (Rauch 2014). It is not unique anymore, but a general phenomenon and becoming one of the most important electronic devices of the modern world. However, it is just a temporary stage – says Mr Gábor Pusztai (2014) – everyone gets tired of the smart devices slowly as nothing lasts forever. It is hospitality – people’ business. The customer has to feel that he is welcome in the hotel. Devices cannot replace it.

One of the benefits of these smartphones is that the user can be connected to the Internet anytime and anywhere. People are able to check emails, browse the web, play games, and use GPS or different kind of applications. Many travellers could make a reservation for hotels, flights and rental cars using the Internet on their smartphone.

Many hospitality companies launched their own applications to provide a better service quality to its customers by offering ticket reservations, concierge assistance or room service orders.

Mobile apps could be utilized on a more effective way to reduce the hotel's marketing cost and reach out to the potential customers. (Kwon, Bae & Blum 2012.)

3.2 Technology-Based Self-Service vs. Traditional Human Touch in the Hotel Life

The role of Technology-Based Self-Service (TBSS) has been significantly improving in the last few years in the hospitality field. However it is not a recent phenomenon: the very first self-service kiosks emerged more than twenty years ago but it was used by just few airlines. It has been developing ever since. (Coates-Conroy 2008.)

TBSS became a popular trend by now and in several cases they are also fashion images in hotel lobbies. Do they get more important role than the Traditional Human Touch Services (THTS)? What do the consumers want and what are their needs? Do they prefer going through on the check-in process and be in their hotel room as soon as they can? Or maybe they need (want or expect) a friendly greeting, a smile and the feeling that they are respected and cared in the hotel where they arrived.

3.2.1 The Technology-Based Self-Service – Pros and Cons

“It may be hard to believe, but before the end of this century, 70 % of today's occupations will likewise be replaced by automation” (Kelly 2013) – the article of the Wired Magazine – a monthly magazine which is about how the technological improvements effect the culture, the economy and politics – is just one out of many where we could read similar “threats”. Chen (2011) also worried about the possible fact that concierges will be replaced by technology because of the check-in/check-out kiosks. However, Dan Phillips pointed out – already in 2002 that technology does not replace humans, it just changes the responsibilities. For example, there might be need for fewer employees behind the Front Desk but there will be demand for more IT experts.

Gábor Pusztai agrees (2014) there will be a demand on the personnel in the future at least in full-service and limited service hotels. However the duties of employees are going to be transformed: it will be more focused on “flow management” and other tasks. “No-service” hotels will also flourish where there is a demand, in Japan for instance. Technology is not more than a tool that makes people's life easier, thus make us more productive.

How Beatson, Lee & Coote pointed out (2007) self-service technologies are all the facilities that enable for customers to produce services for themselves without the interaction of any employees. However, hospitality is a service-oriented industry, where people expect to be served. If hotel guests use self-service kiosks for instance, they are served by themselves in the hotel lobbies, which basically means that the hotel employees ask the customers to serve themselves. Do we still talk about “hospitality”? Even though there is a demand for this form of technology, does not it have a(n) (negative) effect on the hotel service quality? If there is no connection between the employees and the hotel customers, we cannot talk about *hospitality* anymore, it should be called something else. (Pusztai 2014.)

Chen also states in his report (2011) “there is not a hotel only use TBSS and without using staff”. He seems to have overlooked the Scandinavian hotel chain: the hotel what made it popular in 2000 was its cheap rates and self-service system. None of the 12 Omena hotels (Finland, Sweden and Denmark) have their own employees, no front desk – just help desk. Omena keeps things simple: the reservation and payment process happen online – no surprise with that – than the future guest will receive an SMS with a key code what he could access his room with (Omenahotel.com). No need for check out as the code “expires” at a given time. There are no employees – therefore any labour cost: this was the main reason when it was founded fourteen years ago.

According to the recent news Omena hotels are facing bankruptcy – stated Mr Gábor Pusztai (2014) and continued – the average occupancy rate for 2013 in Finland was 46% which is – comparing with the previous years – 6-8% lower; therefore all the full-service hotels were forced to reduce their daily rates, thus the average room rate of full service hotels started to approach the self-service Omena’s prices (70€-135€!) where there is no one taking care of you and breakfast is not included either. No wonder – customers chose hotels where they are being served, recognized and respected.

Schrier, Erdem & Brewer pointed out (2010) organizations tries to increase productivity and decrease labour costs. The main idea behind the utilization of self-service technology achievements that the customer is able to create a product or a service “by utilizing technology with little to no help from the organization providing the products and services”.

According to the Hotel News Now, front desk is going to be out-dated soon; there will not be barrier between the front desk agent and the customer. Smart check-ins will be the substitutes

with radio frequency identification technology - equipped key-cards. The room number will be sent in a message and a barcode will open the room door. By 2016 most of the Hilton rooms will be equipped with this technology. (Turner, 2014.)

There might be no successful accommodation business *only* use Technology-Based Self-Service but the role of TBSS got an essential role in this business field in the last few years. It seems that the traditional full service is rapidly replaced by TBSS and sometimes there is no other option for service delivery (Reinders, Dabholkar & Frambach 2008.) (e. g. Banks are closed on Sundays therefore the only option to obtain our money is the ATMs).

Recently we might assume: there is no successful accommodation business *without* TBSS either. In this speedy world it saves time and makes life easier as there is no need to wait in line at front of the reception; it increases the speed of the delivery service and reduce labour cost at the same time through less staff contact (Beatson, Lee & Coote 2007.), which is not considered as a benefit in every circumstances. When the customer is in hurry, every minute counts. Technology-Based Self-Service has the benefit of the flexible time and location checkout, as it is achievable simultaneously doing other actions like breakfast in the lobby or packing in the hotel room.

In the new Indigo Hotel it will be also possible to checkout via the HD televisions - which will be placed in every guest room - and a remote control. However – as usually – there are few emerging problems: the customer will not have the opportunity to sign the check out papers thus whether his company will accept the bill is dubious in case of emerged misunderstandings.

Besides of the mentioned benefits of TBSS it also gives “space” to the customers by letting them do their own “business” and allowing them the need for control and individual achievement (Chen, 2011). Furthermore it is available in 24/7, easy to use and in the case of successful process it causes enjoyment and feeling of independences. (Meuter, Ostrom, Bitner & Roundtree 2003.)

Upselling is a popular sale strategy in the hospitality industry, too. It does not work just face to face but hotels could also provide opportunities to sale more products or services on the TV screen with some eye-catching pictures and advertisements what the customer could consider

as a one-time chance. By using TBSS it is also possible to reduce the human mistakes what might occur.

However technology is not kind and it does not say, “please” (Enriquez, 2001.). Besides impersonality of TBSS it is expensive to purchase and there are further fees for maintaining its systems. Using technology we also have to consider probable malfunctions which could be caused easily and how Mr Gábor Pusztai referred Murphy’s law: “ Anything that can go wrong will go wrong”. It causes frustration to the customer (drives to dissatisfaction) and he never returns again.

Certain type of people just not ready for the new or keep from the unknown technological gadgets. Even though they learn how to use it properly in different hotels different version of kiosks are provided which might make customers more confused.

3.2.2 Traditional Human Touch Service – Pros and Cons

“There is no technology what could replace a heartfelt smile or make you feel welcome, cared and respected”-shared Mr Gábor Pusztai his belief. “With money you can buy whatever you want – you might maintain a competitive advantage for a day, for a week or a year; eventually all the competitors purchase those achievements. What you could win with is you and your personnel: your hotel is what *you* are and no one could imitate that” – he continued (2014).

Empathy is something what only humans could express. Is it essentials in the hotel business? Certainly! It is the “willingness to take the customer’s perspective, understanding the customer’s annoyance and individual complaint handling” (Stauss, 2002.). Employees should show honest care for their customers. Besides *authenticity* they must be friendly, helpful in a natural – believable way. Customers might prefer human interaction instead of TBSS because of the *competence*. Hotel guest supposedly expect sufficient service from the hotel employees as well as handling the emerging problems on a professional level. The third most important attribute according to Gruber (2011) is the skill of *active listening*. Unlike technologies – human beings could listen what the customers are saying, “hear the customers out”.

Several elder customers chose Restel hotels for their home during their stay in Helsinki. In case of any problem, accident or whether emergency, ambulance is needed there should be a

person, a hotel employee who customers could count on and trust. Someone has to give instructions to the guests in case of fire or earthquake, too.

Trusting, liking, knowing, respecting – these all positively influence the hotel customers, however there is a great chance for negative effects, too.

We are humans, we are different and we cannot act on the same way in a particular situation. Diverse reactions might cause diverse service quality. Even the same person could react differently in the same situation – it depends on his/her mood or the actual circumstances.

Poor language or communication skills could reconsider the quality of service, not to mention human errors – what naturally derived.

3.3 New Technological Products and the Hotel Industry

3.3.1 Wearable Technology

Smart watch has the function like a smart phone just placed on the wrist. However the watch without a smartphone is just capable showing the time. But if the suitable watch is purchased and connected to the suitable phone it will enable to control messages, reading emails, receiving calls and being active on the social network sites. (Martin 2014.)

A study shows that in October 2014 the smart watches made up only 11% of the wearable technology market (The Guardian, 2014.). These devices are getting popular gradually but it is still a long way to become a mass market. All together 420 000 wearable technological achievements have been sold this year with a total value of £51m and about 40% of them were activity trackers. According to the consumers smart watches are overpriced. Wearable achievements are meant to be on belts, shirts, and shoes – how men consumers prefer while women prefer necklaces, bracelets and rings.

The Guardian article introduced the annual statistics as well: health and fitness trackers were the most popular with 39%, “wrist sport computers” with recording possibility 26% and action cameras like GoPro with 24 %. BBC News (2014) predicts that 100 million wearable technology products will be shipped by the end of this decade.

The well-known Google Glass also belongs to the wearable products’ family. Matt Swider – the journalist of Tech Radar – has tested Google Glass for eleven months and now the newest review about this “sci-fi looking gadget” is available for the public (2014). What does Google

Glass capable of? How Swider described, we have to visualize our smartphone screen at the top right corner of our eye. It follows instructions by voice commands thus it could easily take a picture and upload to a social media site by saying: “Glass, take a picture!”

Besides taking pictures, Google Glass is able to record videos, show a compass, get directions, send a message, make a call or listen to some music. However it is incredibly expensive (about 2200 €), it has a poor battery life and limited number of apps thus the price-to-value ratio is questionable.

According to Reggie Middleton – who is the American “financial Nostradamus” – wearable watches do not make too much sense, as they are simply extensions of mobile phones but with limited functions while has found the opportunities in the Google Glass and predicts its dramatic impact on service industry and the ability to deliver an interactive experience that has never been experienced before. Reggie Middleton Revolutionizes the Hospitality Industry with Google Glass. “It gives something that cannot be done with a phone or watch, or necklace or bracelet”. (YouTube 2013.)

3.3.2 Interactive Mobile Technology

Interactive Mobile Technologies (IMTs) give the chance to the hotel customers to facilitate certain tasks and increase the amenity of the overall experience (Zhu & Morosan 2014). These technologies consist of hardware, software and Wi-Fi connection. IMT offer the guests to make orders, find information and contact hotel staff as well as control room features. Understanding the guest’ adaptation of IMTs is essential for hoteliers for further developments, enhance the hotel stay experience, thus to increase the revenue. The study proves that guests perceive ease of use of IMTs which has a positive impact on the guest attitude, perceived usefulness and also brings playfulness into their hotel stay experience.

Remote controls and switches are becoming old-fashioned tools in the hotel rooms. “Digi James” is a trendy tablet device what wirelessly controls room facilities (e.g. lighting, curtains, messages etc.), a virtual concierge what enables of ordering meals, requesting housekeeping and informing the hotel guest about the current promotions, festivals and other events around the hotel and tailor-made recommendations are also included. (4Hoteliers 2014.)

“Guest Empowerment Technologies” (GEM) are electronic systems that allow to hotel customers to have more personal control over their stay in a hotel and it provides more convenience to the guest without a direct interaction from the hotel employees (Schrier, Erdem & Brewer 2010). Besides the most common GEM – self service kiosks in hotel lobbies – there are several more which enhance the customer experience: these are the in-room entertainment technologies such as movie and video gaming on-demand services, mp3 player docking stations and digital video recorders. It seems, hotel guests expect the newest technologies in the hotel they chose to stay and where the best devices are available. (Incentive Travel 2014.)

Similar technologies are getting popular not just in the hotel world but in the everyday life as well. The Leviton software is suitable for iPhones, iPods and Android-worked devices and enables to control the status of homes with setting up temperature, alarm system, locks on main doors, it switches off the TV, controls cameras and lighting from every spot of the world with a single device. (Leviton, 2013.)

3.3.3 Technological Achievements in Hotel Indigo Helsinki – Boulevard

There will be possible to make room reservation via mobile phones, using the IHG official application that could be downloaded anytime and anywhere. It gives the opportunity to check in before arriving and the client will receive a notification if his room gets ready. The IHG® app makes it easier to research, book or manage an accommodation in all the IHG hotels in more than 4 600 hotels across more than 100 countries. Having the app downloaded the potential guest will be rewarded and becoming an elite member of the company’s loyalty programme which will mean further benefits for the honoured client. This app also gives all the easy contacts and directions, which needed and also inform the user about special offers and discounts within IHG. (IHG Apps)

People like to be socializing. Doyle (2014) also mentions in her article that hotel lobbies increasingly are being transformed into multi-use spaces, as hotel guests prefer spending time out of their room. They like company or people around them while they can still enjoy a drink or a meal and also could use their devices. Hotel Indigo will be equipped with all the expected tools and in the lobby there will be wireless charger stations, thus customers do not need to interrupt their activities if their device is gone flat. In the hotel lobby there will be information touch screen monitors with all the essential information (or more) which might be important for the hotel guest, including news, weather forecast of the current location, maps, shops etc.,

the content will be controlled by the hotel staff.

Media hubs will be found in every room, making available multimedia contents stream from the Internet to the Interactive HD Televisions. Hotel guests will be able to sync up their devices with the HD TV, thus they could play their own content on a greater display which actually counts as one of the twenty most important hotel trends of the future (Doyle, 2014.).

3.3.4 Internal Communication in Organizations

All hotel executives must be able to communicate with their staff and with the public in an effective manner. In many cases hotel companies hire far more staff than other industries, providing personal service for customers on a high level. Thus the interaction between guests and employees is greater in hotel companies; therefore the necessity of the education on proper online behavior is questionable. (Bagley & Lanz 2014.)

The study of Bagely and Lanz indicates that probably one full-time employee is more than enough to handling the company's social media sites with less client interaction because hotel companies operate on a more direct level. However reacting all the posts links and comments that are arriving constantly might sound unrealistic to respond each message that mentioned the particular brand (Moore & Stone 2013). It is worth to answer for all kind of interaction as people like the fact that the company acknowledged them.

Employees are the organization's public face and the major challenge is managing how employees should represent the organization (Real PR). Companies need to do a better job in sharing and collaborating according to the article of Business Insider (2014). First of all companies should trust in its personnel and hear the employee out as it is a current problem that they are not listened by the management. Digital world should empower its employees and encourage them to telling their opinions and sharing their comments. The solution would be to create a culture of sharing where the organization encourages communication and sharing ideas.

IHG Owners Association also shows a great example for the effective communication manner. Kemmons Wilson, the founder of Holiday Inns in 1950 established the principles of the company's direct communication approach in-between franchisees and his idea is still kept on. IHG executives travel to meet with owners and operators and ensuring that all the IHG priorities are communicated to all properties. This model has been imitated in the hotel industry.

3.4 The Power of Social Media

How it was mentioned earlier, the invention of telephone revolutionized the area of communication. Then the Internet appeared and it made possible to transmitting messages within seconds and staying in touch on a daily base (Fennel, eHow). The Internet and all he accompanied elements (e.g. emails, apps or social media) had a significant impact on our communication.

Social media sites – especially Twitter gives a reason for parents to concern because of the poor grammar and verbal text speak. It allows only 140 characters for expressing our thoughts and usually it is only possible with a great amount of abbreviations therefore it changes the way to communicate (Chopra 2013). The teenagers might not show willingness to communicate in whole sentences, just using sentence fragments with their online friends. They will not be able to develop their crucial communication skills that would be needed for situations later on life, on a job interview for instance (Burchat 2013). On the other hand, because of the limited characters you have to get to the point faster and with this it is possible to save time and energy.

Albert Einstein's quote is well known all over the world: "It has become appallingly obvious that our technology has exceeded our humanity". People generally agree that the new technology has its benefits while they make us take massive steps backwards as a society by losing face-to-face communication (Schwartz 2014).

The journalist of Viral Global News writes about a "lonely crowd" as a today's phenomenon, a new type of social system when people meet and get busy tweeting and posting on social media sites. Devitt (2012) draws a parallel in-between automobile and social media: automobiles were meant to be connecting people with shorter travel time, providing a faster and more comfortable service while causing a significant negative impact on the environment. Social media instead of provide more time for being creative individuals it destroys communities, communication and natural settings.

"Facebook and Twitter are just addictive as smoking cigarettes" (The Telegraph 2012).

Which means that we are becoming more dependant on the social media; and as the applications make possible to be available 24/7 just increase people's addiction even more.

One difference (besides many) between the face-to-face and social media communication that in the case the latest, we could decide, who and when we want to interact with additionally we control every piece of information what we wish to share (ITViz 2013). We can be whoever we want behind the screens and we can create the image about ourselves what we always dreamed about.

We live in a fast-paced world. We do not have time for real friends because it takes time and efforts to maintain a friendship. Instead of get the phone and dial the number, we *poke* on Facebook instead. Having “friendships” on Facebook also gives the option to avoid the trauma of saying goodbye. We never have to close a relationship; it is evaporating slowly by decreasing interactions (Pearson 2010).

Not so much people are interested in the dinner choice of acquaintances, however it is a popular “tradition” to posting pictures about the meal what is on the dinner table on the actual evening. According to Pearson, people do it because they want to feel closer and they are able to maintain their presence through the distance. On the other hand, most people want to feel popular and the high number of connected friends might make someone delightful and it gives acknowledgement of being liked and popular.

Last but not least, Facebook also gives the possibility to make comparisons. All the private information is public so it is easy to follow if someone getting too far ahead at work, getting overwhelmed or feeling some kind of joy if the other one fall behind.

The above-mentioned examples are the main purposes why the Facebook will never collapse.

3.4.1 Social Media in the Hospitality Industry

As Online Social Networking have gained meaningful popularity by now considered among the most popular sites on the web. It gives the opportunity to socialize with friends, share content schedules and interests. A network is built around the common interest such as sport, music health, finance or games and there is also a community created by commercial purposes. (Kasavana, Nusair & Teodosic 2010.)

For many companies – especially on the hospitality field – social media (e.g. Facebook, Twitter and Instagram) counts as a profitable marketing tool. Having Internet connection allows

for individuals and also organizations to connect from every part of the world at any time. It also allows sharing information, discuss and make inquiries (Wang & Fesenmaier 2004).

Rick Tramonto – an executive chef and partner of Restaurant Revolution in New Orleans usually spends 30 minutes on social media sites in the morning with definitely the big three: Twitter, Facebook and Instagram. He reposts a customer photo on Instagram and trying to include as many hashtags as possible. This strategy has helped his restaurant to go from 100 followers to over 400 in a few months. While he is there, he will usually 'like' 10 to 15 photos from fellow local small businesses or very active customers. Depending on the content, he usually shares the Instagram posts with the Facebook page – “two birds, one stone” – he says (Stoessel 2014).

It is possible to obtaining, collecting information and read feedbacks about particular firms or services – this is the online version of the word of mouth. It makes possible future improvements and better customer service. Obtaining the customers' comments and conversations help the organization to follow the newest trends and the recent customer demands. Therefore it also shows the direction, how to be unique and break out of the *average* (Kang 2011, 11).

Travellers use Internet as a major starting point for seeking a destination and book a hotel room (Phelan, Chen & Haney 2013). During the “pre-stay” stage Facebook is a popular source to gathered information about the destination, activities, attractions, transformation options or dining (etc.) and also gives the chance to influence positively or negatively the potential customer.

During the “stay” stage customers are adored “tagging” friends, “sharing” pictures or posting comments. It also provides the opportunity to visit those locations, which have been suggested based on previous traveller experiences. Customers also utilize social networking sites to share their views after visiting the property. If the quality of the hotel services and facilities met the customer's expectations it is popular to post the joyful moments on the Facebook wall as well as recommend the hotel for family and friends etc.

How Mr Gábor Pusztai pointed out (2014): “If your business is not reviewed, you do not even exist!” Do feedbacks influence a potential guest decision before booking a hotel room? Yes,

indeed. It is worth to read through few of the latest feedbacks on the particular TPI sites (Third Party Intermediaries) and the further process depends on the *reliable* client comments.

A study which was made by Trip Advisor in 2013 showed that the main information source of these sites were mostly friend and family members and the word-of-mouth was transforming itself into *world-of-mouth*. It also explained that today 93% of travellers said that online feedbacks had an impact on their final booking decision. (Gonzalo 2013.) The study shows that the most important amenity when booking a room was the free in-room Wi-Fi connection.

How a study pointed out (Bulchand-Gidumal, Melián-González & López-Valcárcel, 2013.), offering free Wi-Fi for hotel guests helps increasing the rates by 8%. However many of high quality hotels could not allow offering free Wi-Fi connection to their customers. This is one of the greatest problems recently in the hotel life, as hotels buy bandwidth from the suppliers in packages, which are high-priced and offering this service to the hotel customers for free would not be profitable. (Pusztai 2014.) Hotel Indigo will offer fast Internet connection to its future customers and the quality will be gradually modifying by the status of the guest. Hopefully this will be a great bargain and the guests will be satisfied.

3.4.2 Social Media in Swissôtel Tallinn

My two-month long advanced placement has been achieved in Swissôtel Tallinn, started on the 1st of September 2014. Swissôtel Tallinn is a new luxury hotel located in the heart of the capital in the city's tallest building with a modern and functional design with renowned standards of Swiss hospitality and product quality. Currently Swissôtel Hotels and Resorts are having 37 properties in 17 countries all over the world and managed as a single global enterprise under the umbrella of Fairmont Raffles Hotels International.

During my internship I worked on the Sales & Marketing Department of the hotel and assisted to all the Sales Managers and Coordinators. I supported the Sales & Marketing team with various tasks furthermore I was heavily involved in social media content management, too. Besides getting the comprehensive picture of the Conference & Banqueting works, I was responsible for giving responses for Trip Advisor feedbacks and preparing *tweets* and posting them regularly on Twitter. Choosing the most suitable photos and comments on Twitter and Facebook was also a meticulous work aiming the hotel be attractive and receives as much likes, followers and *retweets* as possible. I learnt – already at the beginning of my internship –

what a powerful tool the social media was, how easily we could interact or having an effect on the potential or returning customers.

To keep in shape the Facebook site at Swissôtel Tallinn, the particular Sales Manager – who is also responsible for social media – need to be very interactive and post regularly. The aim is to be as attractive as possible for the audience to get more likes, and provide as many information to the guests as possible. Very important is to have good look at the corporate standards, because there are some guidelines and restrictions for social media. To have an overview of the postings and actions, managers use a *Social Media Calendar*, which provides all the information about the posts on Facebook. Then it has to be sent to the Director of Sales, who will analyse the data and give instructions about further improvements if needed.

Responding to comments on social media channels and online review sites like Trip Advisor can be one of the most challenging and yet rewarding parts of Community Management. Swissôtel Tallinn responses are essential to serving guests and managing its online reputation. The hotel receives a mix of positive, negative, and neutral remarks on various social media pages and review sites. Most of them are positive, but *all* reviews deserve attention.

On Facebook, Swissôtel aims to respond to 100% of the posts. Sales managers uses “Trust You” to manage online reviews, as well as measure and report on the monthly response rates against the competition.

In all cases, the Sales Management Team gets the task of responding the reviews. Excellent written communication skill is an essential requirement for this job; knowing the voice of the brand is also crucial. These social media “review champions” should be appointed by the General Manager (GM) in order to speak on behalf of the hotel.

Facebook is more about engaging with guests in a casual environment than dealing with customer service issues. On review sites, a GM-appointed senior manager is recommended to handle responses and reviews and relay the feedback to GM (Swissôtel 2014).

Responding to positive comments is effective and easy to do, and rewards customers for interacting with the hotel. As the guidebook points out (2014) when a fan gets a public response from a brand that they have taken the time to interact with, they will often feel excited and develop a closer connection with the brand. They will remain loyal to the brand, and spend

more time with the firm online. These people are becoming friends and advocates of the brand, so the company should value them greatly.

It is also important to handle all negative comments within 24 hours, if not sooner. It is necessary to keep in mind that responses are public, so it is significant to represent the property well.

4 GMs of Helsinki Restel Hotels About the Digital World

By now, we might get a comprehensive picture about the impacts of the digital technology in general and its influences on the hotel industry. However, I was more curious and asked the Helsinki experts about their experiences and opinions what they think about the above-mentioned effects and what they expect from future.

A survey had been composed and sent to all the General Managers of Restel Hotels in the Helsinki area. The answers were received from the GM of

- Crown Plaza
- Cumulus Hakaniemi
- Cumulus Kaisaniemi
- Cumulus Olympia
- Holiday Inn City Centre
- Holiday Inn Helsinki West
- Holiday Inn Messukeskus
- Seurahuone

The “Likert Scale” method had been chosen as it enables to measure the opinions by asking the general managers to respond to eleven statements. These statements are about the future technology improvements, trends, communication and personal connection in this digital world. It also covers the uncertainty of the automated future. This type of scale measures the level of agreements and disagreements (McLeod 2008), in this case the GMs were asked to select their answers on a 1-10 scale (1=Truly disagree and 10=Truly agree), which they consider to reflect their opinion the most. All the answers were accurately analysed which gives the pure picture what the Helsinki hotel professionals think.

All the General Managers received the following statements:

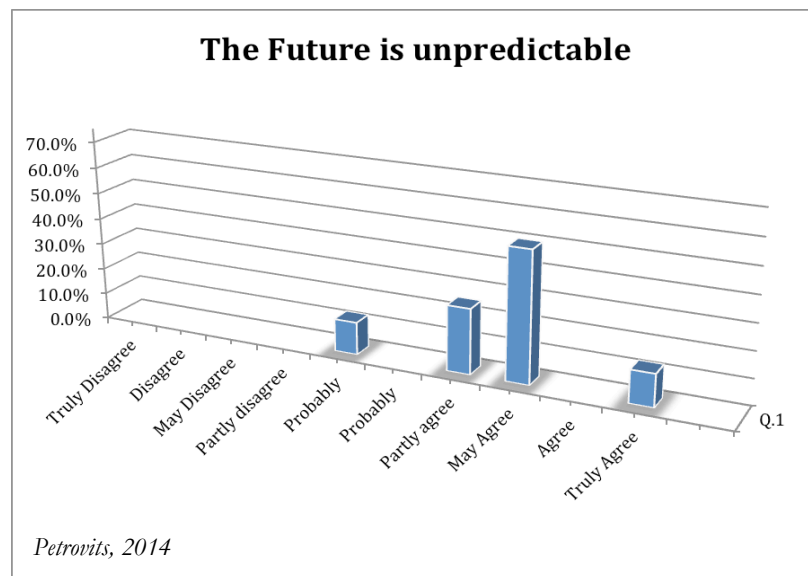
1. The Future is unpredictable
2. Technology is exceedingly important for hotel guests
3. Hotel Technological facilities influence potential guests' decision before reserve a hotel room
4. Achievements of trends and technologies create poorer communication

5. In this digital world I feel loosing personal connection with clients
6. Before the end of this century, 70% of today's occupations will be replaced by automation
7. There is no technology what could replace a heartfelt smile or make the client feel welcomed and cared
8. By time everyone gets tired of the smart devices; nothing lasts forever
9. Technological-Base Self Service (e.g. kiosks in hotel lobby) is an essential trend in the hospitality industry
10. There are many trends and achievements what do not make too much sense...
11. Customer involvement by social media enhance business opportunities

One extra question was also included in the survey: they were asked to share their thoughts about trends and technological improvements what they consider to follow.

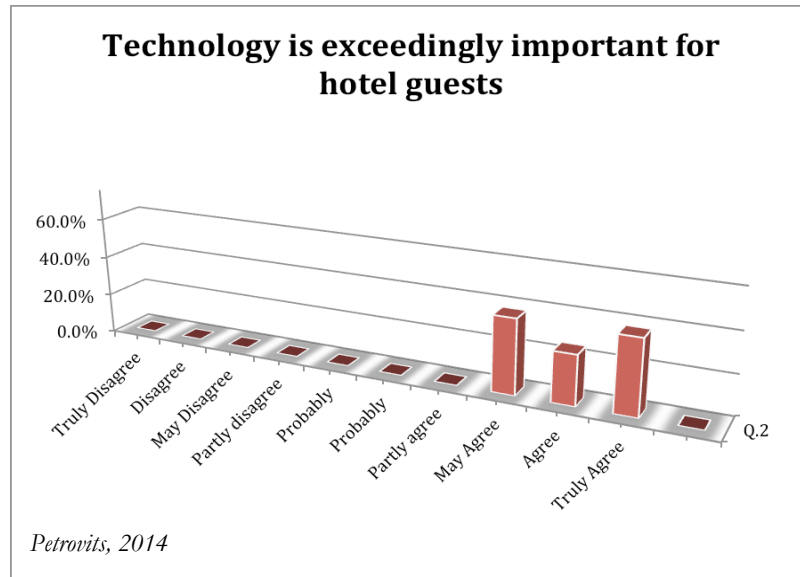
Even though there was also possible to leave comments under the particular questions, just few responders took the opportunity and went into detail; in three cases there was no answer received.

Statement 1.



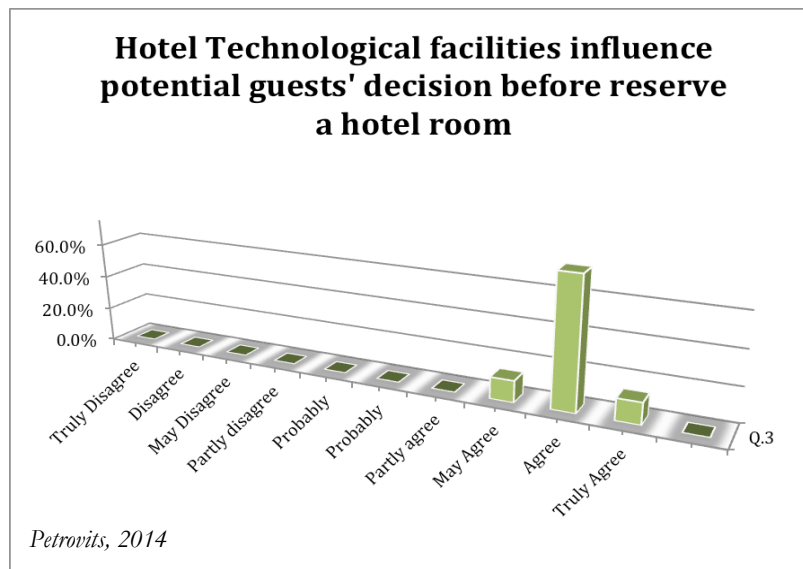
One of the GMs truly disagree that the future is predictable. She/he ensures no one could know what the future brings and does not trust in any techniques, which might show the direction. Half of the participants also agrees that the future unpredictable, however their beliefs are not as convinced as in the previous case. According to one of the comment: "Trends come and go, predictability depends on the economical circumstances."

Statement 2.



General Managers have the very similar opinion about the importance of technologies in the Finnish hospitality industry. Three of them truly agree and three of them might agree that it is extremely important for the customers and there is no successful hospitality business without a well-equipped, technological-improved hotel. How one of the comments says: “There is no way turning back.”

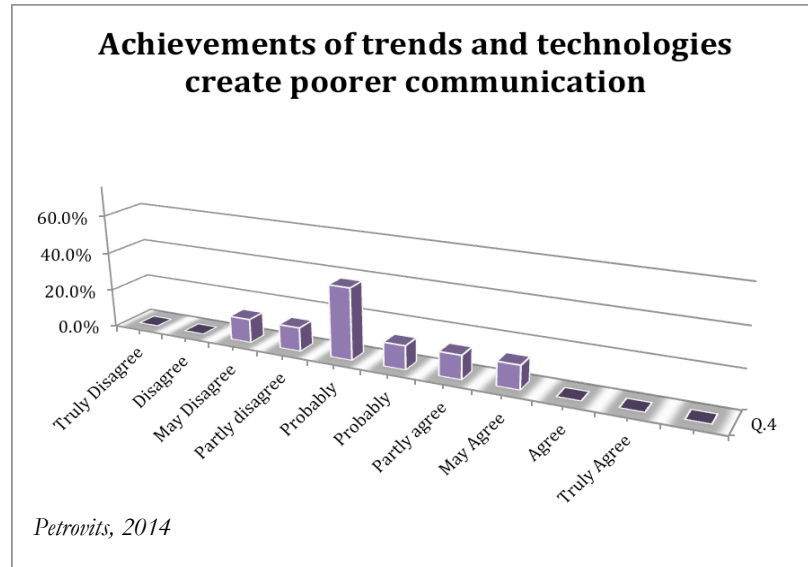
Statement 3.



To what extent do hotel technologies influence potential customers before making a room reservation? 75% of the responses say that technological achievements have a great influence and they could be easily the decision maker factors in choosing between hotels.

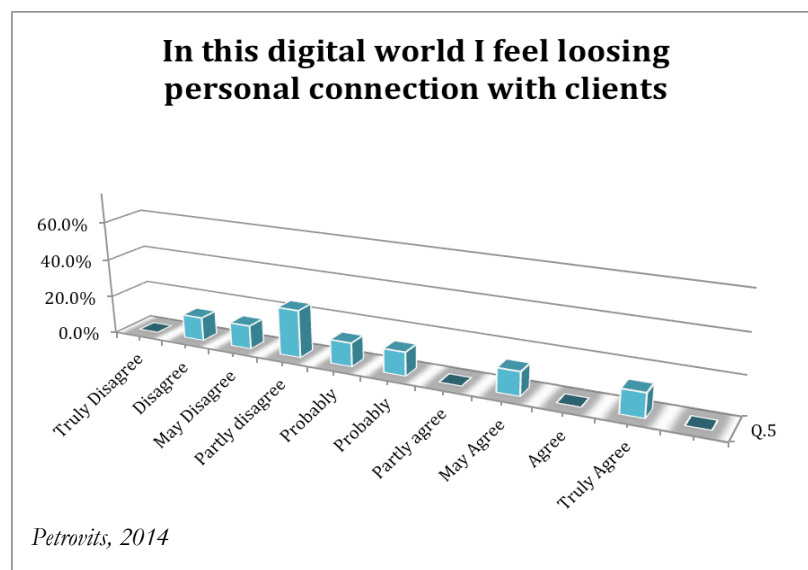
One of the eight GMs persuaded that it is an essential element among potential customers. One of the commenters also agrees with the statement and added: "More and more important that connections work properly."

Statement 4.



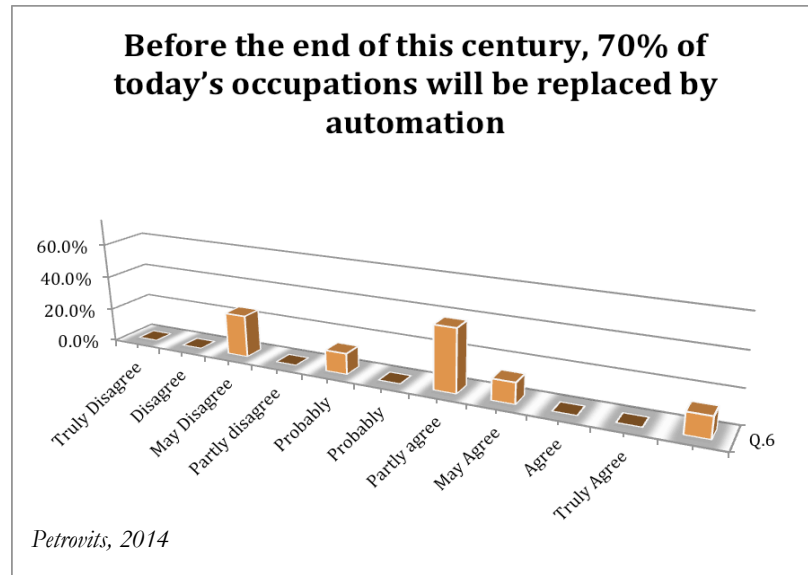
Opinions are divided very much. Only two of the GMs *partly* agree or *may* agree that achievements of trends and technologies create a poorer quality in communication. Rest of them do not really think and may hope, it will be not a problem in the future.

Statement 5.



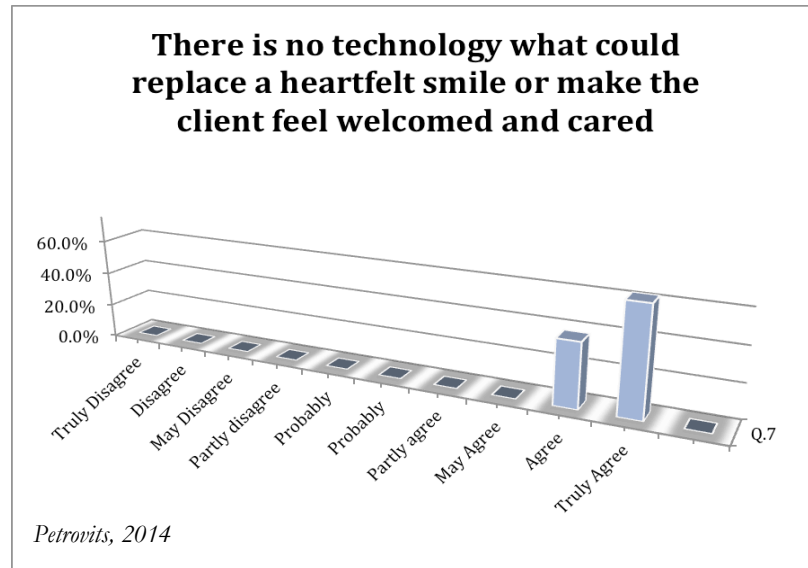
Responses arrived on the widest scale in the case of this statement. One of the GM's truly agrees that this digital world forces us to loose personal connection with the clients while another Helsinki GM disagrees with it and not feeling thread of losing the personal connection because of the digital achievements. One of the general managers partly also agrees: "because clients have so many channels to choose from for reservations for example".

Statement 6.



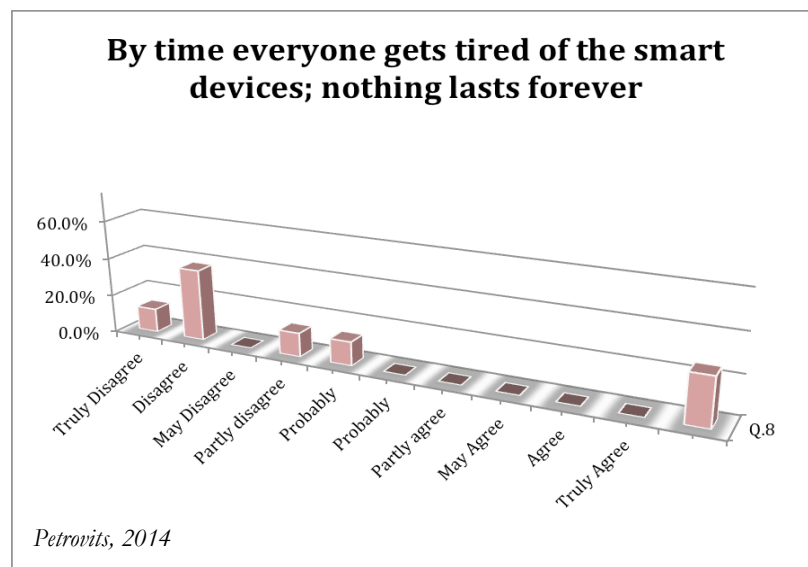
More of the GMs think that there is a great possibility that before the end of this century, 70% of today's occupations will be replaced by automation. 25% disagreed with the Wired Magazine's – and many other – article(s), researches and verifications; three of the participants might agrees there is a great chance for that and there is also an invalid survey arrived with no opinion.

Statement 7.



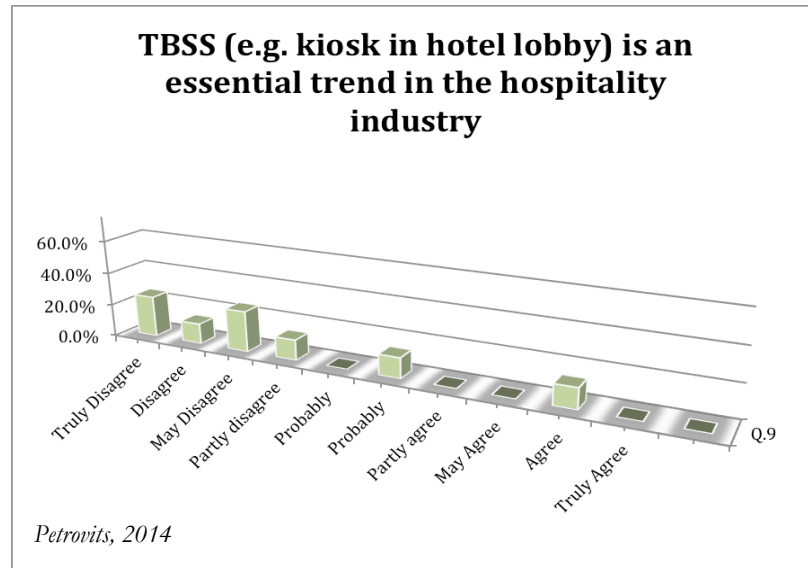
Agrees or truly agrees all the general managers that there is no technology what could replace a heartfelt smile or make the client feel welcomed and cared. "Human interaction can't be replaced."

Statement 8.



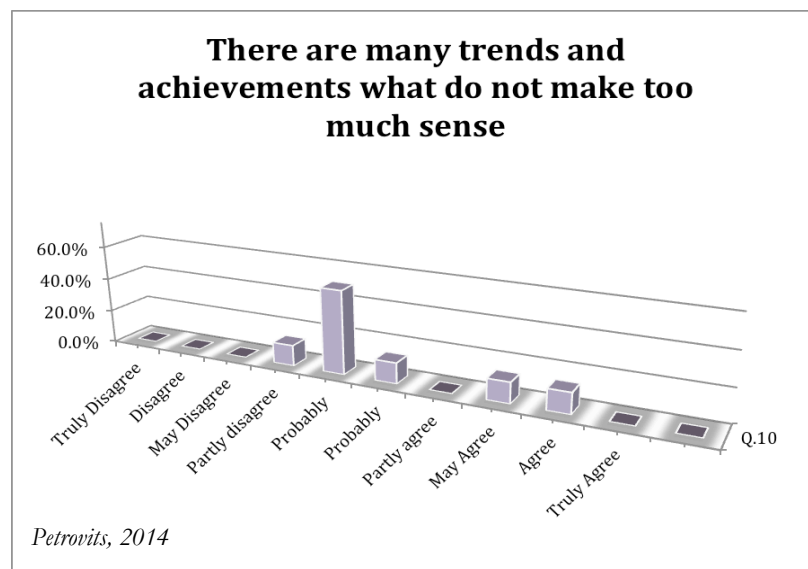
Only six answers arrived for this question. Rest of the GMs disagreed that by time everyone gets tired of the smart devices as nothing last forever. No one believes it is just a temporary, short-lived tendency. "There is no way turning back"- was in the comment.

Statement 9.



It seems in the Helsinki hotel industry the Technological-Base Self Service (e.g. check-in kiosk) is not an essential trend. 75% of the responders disagree in some extent while one of them stated the high importance of TBSS and agrees – it is essential. “Maybe in some budget brands but not in general.” ”Related to the hotel category, in midscale hotels yes, in luxury hotels no.”

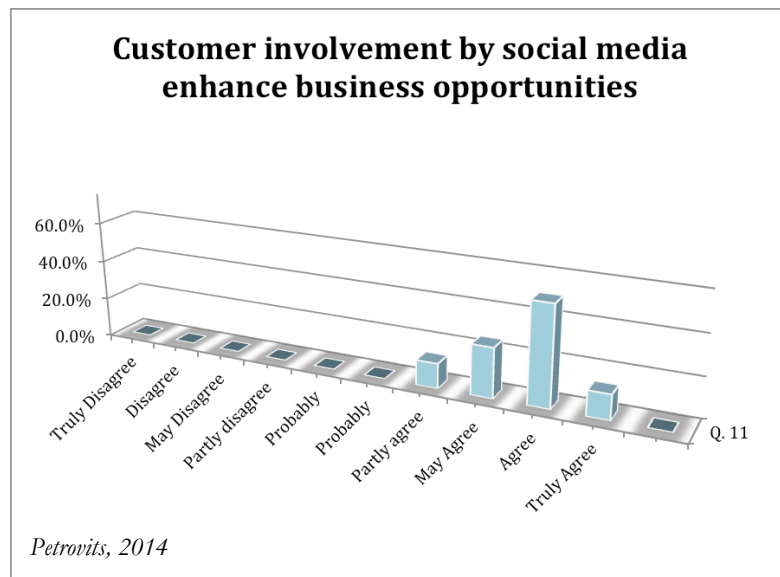
Statement 10.



The answers differed from my expectations in the case of this statement. Instead of marking 10 (truly agree), the opinions were varied. One of the responders even partly disagreed there would be many trends or achievements what do not make too much sense.

25% of the GMs agrees or partly agrees with this statement and rest of them thing there is a probable chance that we could find useless achievement in the industry.

Statement 11.



Mostly everyone agrees on a different level that customer involvement by social media enhances business opportunities. Five GM's agree or truly agree the high importance, the power of Social Media. "If handled well."

+1 question:

What are the trends and technological improvements that Helsinki hotel managers consider following in the future?

One of the GMs would like to pay more attention to the increasing importance of reputation management; furthermore capturing the customers with unique guest experience and service is another future plan what he/she would bring to notice. The third most important what he/she mentioned: speed in all actions: booking, check in, wireless connections, communication etc. Another suggestion arrived, too: iPad should be provided to the hotel guest during their stay. Faster and wider Wi-Fi was also on the list as a future technological improvement.

5 The Future

5.1 How to Tell the Future?

Few articles from the past have already showed (e.g. Hansen & Raymond, 1995) that the future is predictable without using a crystal ball. New achievements might be born from ideas that have been existed already and adding some research and creativeness could be resulting *the new*.

First of all, being up-to-date and being aware of facts, data, recent journals and reviews are all the key sources of creating the future as well as imagination, simulation games and science fiction (Björkvist 2014). Knowledge-sharing methods like trainings, conferences are all the ways to exchange experiences and therefore the received information could be processed in different ways – depends on the creativeness of the human mind.

Futurologists also tell about the future, as this is what they study. They mainly takes into consideration technology, social, economical, political and social factors like *Ian Pearson*, one of the most popular futurologists who speaks about the future in any aspects and had been rewarded many times; he has also published books and has made approximately 400 television and radio appearances. (Speakers 2014.) His main tools are analysis, trends and a strong background in science and engineering, additionally “common sense and reasonable business acumen” and knowing when to listen to other people (Pearson 2014). However, he could go wrong, too – he said – there is a 15% chance that something occurs differently how he predicts.

Among other things he expects very tight connection between humans and machines in the future, moreover extension of our minds into the machine world as well as electronic immortality. (Pearson 2008.) He also predicts the first colonies away from Earth.

5.2 Hospitality Trends of the Future

How the World Travel Market points out (2014) tablets and smartphones are creating a new business environment for the travel and tourism industry. Consumers are becoming increasingly comfortable using their devices creating with this a significant transactional channel. According to the article online sales are expected to grow faster than the total travel industry, and it seems going to reach US \$ 827 billion by 2017. Within 2-3 years 45% of the world's population (about 3.3 billion people) will be Internet users, they will have smartphones and will be online 24/7. The travel industry will count on this data, and considers it as a primary principal in the future.

Skyscanner is one of the most popular websites among travellers as it provides data about more than 1000 airlines and millions of routs and hotels while makes comparison between prices and offers them from the cheapest options within seconds. Skyscanner and its 56 editors, researchers and future networkers came up with the *Future of Travel* report (2014), how the hospitality industry (especially travel and hotel industries) will change in the next ten years. By 2024 the “Artificial Intelligence” will change the whole way we manage our reservations for a holiday and most likely travel websites will provide personalized offers even without asking.

Last twenty years was about social networks, by registration on different Internet sites, creating online profiles, giving personal information, sharing opinions, comments, habits and likes. The next twenty years will be about using up these data, which has been gathered during the years; Skyscanner (2014) just calls it the ‘Big Friendly Data’ (BFD). Moreover it mentions another “friend”, the Digital Travel Body - each of us will have one in the future - which is basically a wearable technological achievement powered by microchips, a watch or a jewelry what we will wear all the time and constantly connected to the Internet and it will understand our individual preferences based on our *likes* and *dislikes*. It will act as a tour guide, letting us know all the interesting information about a particular destination of anything we are interested in.

Futurologist of Skyscanner Dr. Ian Yeoman highlighted that Google Glass would be mainstream within 18 months. However five years later, it will be already substituted by contact lens.

According to the report in 2024 there will be websites which are operated by travel brands and offer “virtual reality samples” that show the potential traveller the view of the particular destination she/he plans to see and be able to hear the sounds as well and enables to the user to take an amazingly realistic walk through the streets for instance.

How the report emphasizes, booking will be a quick and easy process and the future travel websites will know our preferences from the previous online actions.

The Skyscanner report also shares what the most popular destinations will be in the future. It will recommend some relaxing destinations at the blue-green curvature of the Earth for instance and commercial flights to the Mars. Space travel will be a great trend in the next decade. Of course it is not a new phenomenon, as tickets to the space are already available for \$ 75 000, but commercial companies are already working on to provide more affordable possibilities. Underwater hotels are already existed as well but the number of them will be increasing in the future and becoming popular destinations in the future.

5.3 The Future of Sleep

Sometimes there is nothing more important than a good night sleep. It will be also the basic concept in the hotel industry in ten-twenty years, but probably there will be couple of significant changes in the future hotel room.

It is often harder to fall in sleep away from home. Creating the home environment seems to be one of the trends in the future hotel room (Pearson 2011). It will be possible to watch TV while keeping the eyes closed by wearing active lenses, what deliver 3D images directly onto the retina. Sleep-cycle alarms will monitor the electrical activity in the brain, which recognize the best time to wake up, thus the hotel customer will be fresh as a daisy in the morning.

Pyjamas with emit infrared radiation will be standard nightwear which will create the illusion of the sunshine, being at the beach for instance. But there will be an a la carte dream menu, which we can choose from what we would like to dream about.

According to Pearson, dream linking will be also possible which means if a friend is dreaming at the same time it will be possible to communicate with them in the dream which could be recorded and played back. There will not be nightmares anymore.

Putting a textbook under the pillow in the evening and taking out all the knowledge by the morning was the dream of every eleven years old children in primary school. In 2035 so-called sleep-time learning will be a widespread possibility to learn a language or new skills; dreams will come true...

Personalization and customized service are already trends in many hotels and it most likely will be augmented. Hotel guests are looking for the “home experience” far from their homes, thus technology and creativeness make possible to create physical changes – wall colours, design, pictures – according to the demand in hotel rooms now and in the future. Female executives do not feel that “the hotel industry embraces them” therefore hotels have already created female-friendly programs for women travellers. (Doyle 2014.)

Hotel room walls, ceiling and floor will be giant tablets. The tailor-made design will be the trend: hotel guest could start personalizing their room after arriving. Uploading pictures to the wall, using the floor as a calendar or choosing a theme for the room will be the future tendency. (News.com 2013.) Skyscanner (2014) shares the opinion of highly personalized future hotel experience: it predicts interactive walls, stunning images and family portraits on the wall, while for The Guardian (Coldwell 2014.) it more represents isolation where “one feels trapped in a computer-dominated digi-limbo”.

Intelligent furniture will be welcoming the future hotel guests with built-in memory that will adapt to changes in body posture. It will be also possible to choose in advance the design and the room décor they wish to greet them. (Doyle 2014.) Fluffy towels will be the things of the past: there will be ultimate blow dryers in every bathroom of the future hotel room, which also a great step for saving the environment: millions of gallons of waters are used for washing towels not to mention labour cost, soap or electricity. Digital appearance will be another trend in the future. Digital Mirrors what show different alternatives of make-ups or hairstyles seeing yourself not what you are but what you want to be – might be found in every hotel rooms in 8-10 years. (Collins 2008.)

The American interior designer and architect, Adam D. Tihany describes the future hotel room as a scene of a James Bond movie where the classic design meets with tomorrow’s technology (2011). Photovoltaic glass will be the basic element of windows, mirror television screen and interactive touchscreen display and a robotic bartender will mix the best martinis – shaken, not stirred – in the hotel lobby bar.

With wireless technology it will be possible to control not just the basic room facilities (lighting, temperature, air conditioning etc.) but also the whole environment: creating a joyful atmosphere in the case of sadness by utilizing the voice control. But Tihany emphasizes that even with the technology - the principal of luxury will always be the personal touch.

5.4 Future Careers – The Substitutes of Human Beings

Shimon is a musician, Big Jim is a cop and Mind Mentor is a therapist while RUBI is a teacher. What is common in all these four? They are all robots. By the end of this century 70% of today's occupation will likewise be replaced by automation, robot replacement is just a matter of time" (Kelly 2013).

The article from Wired Magazine discusses the process how the machines slowly but surely will replace current human works starting with line workers, pursuing by workers in warehouses as these machines could easily lift 70-80 kg boxes and place them on trucks. It will be followed by fruits and vegetable picking robots then the cleaners in offices and schools. It will continue with the white-collar workers' replacement. There are already robots that write articles, newspaper stories and also dealing with paperwork. Surgery for instance becoming robotic and how the article says: lawyers, reporters, personal trainers and comedians will be automated as well. In the Chinese Dalu Robot Restaurant androids take the customers order and serve 300 customers in the same time with a smile and no complain.

According to Georgia Graham, the university minister of England predicts that high-level professionals are going to be automated and not those where manual tasks needed such as making a cup of tea. The manual tasks are much more challenging to replicate. (Graham 2014.)

By 2020 personal robot slaves are going to be found in every households and they will act like butlers (Singh 2012). In August 2014 in Aloft Hotel in California the very first hotel butler ("Botlr") introduced as a new trend for enhancing personal connection with the hotel guest (Shore 2014). The article is questioning the personality of this service (I think with a reason) – as there is no direct connection between the hotel employees and the customers.

"Botlr" is capable to deliver items between the reception and the hotel rooms, so for example if there is a request for a towel or a bottle of mineral water, a front office staff place it into

Botlr's "storage box", type the room number on his touchscreen phablet, which is something between the **smartphone** and the **tablet** (Poh 2013.) and by the help of the WIFI connection he launch to achieve his mission. Botlr does not expect any tip, just a tweet as a feedback for his service. What is the customer benefit? There is no exact answer. Moreover Botlr does not make stairs and if the WIFI stop working so does Botlr...All in all he is a great creature – "just does not make too much sense". (Shore 2014.)

A robot butler served Singh already in 2008; Asimo brought him a drink in the Honda's waiting area. Three years later – with an addition of artificial intelligence – the butler was already capable to make independent decision, which means, his actions were close to a human's.

Robotic technology is not a new science; it started in the 1950's and it has been developing in the last 60 years. By now, they are being used in transportation, agriculture, space travel and many other areas; the USA predicts that 30 % of its army will be robotized by 2030. Robotic technology will have a deep influence on the manufacturing; human roles are already replaced by robots, therefore people are losing their jobs as they are easily substituted. (Singh 2008.)

Ian Pearson shares the above-mentioned view; perhaps he sees it a little bit brighter (2007). Jobs that are analysing, processing or creating information will be automated, however those jobs where it is needed to know where the customer comes and how do they feel, where needs empathy or sympathy the role is for the people's: child care and teaching, waiting, sales and marketing as well as nursing always stay the jobs what are achievable by only humans. Pearson emphasizes that the body language, facial expressions the tone of voice will be always essential components to sell *a package* to the client.

However Martin Smith, Professor of Robotics at Middlesex University has a different opinion (2014) regarding the fact that childcare and teaching will not be replaced by robots. Smith and his colleague already developed a humanoid robot that had taught children in primary schools to recycling waste. He is persuaded that it was a very effective teaching method, which helped to more than two million children in England to learn about the environmentally sustainable lifestyles.

What does Smith expect form the future? Robots will possess emotional intelligence. They will not feel but be able to show emotions like a great actor. Robots will be capable to think, judge

and solve problems furthermore he also expects self-control, openness and the capability to identifying people's emotions and feelings.

However future robots will have their inherent dangers, too. "There is a potential risk that corrupt dictators create armies of killer robots" – he says. That is unappealing...

5.5 The Future Had Been Started 100 Years Ago

The following quote was published by Samuel Butler, the Victorian-era English author in 1914 as a part of his essay collection:

We regret deeply that our knowledge both of natural history and of machinery is too small to enable us to undertake the gigantic task of classifying machines into the genera and sub-genera, species, varieties and sub-varieties, and so forth, of tracing the connecting links between machines of widely different characters, of pointing out how subservience to the use of man has played that part among machines [...] We are daily giving them greater power and supplying by all sorts of ingenious contrivances that self-regulating, self-acting power which will be to them what intellect has been to the human race. (Butler 1914, 181, 183.)

One hundred years ago *the machines with greater power* was already a topic to write about and being published. Isn't it fascinating? Moreover the original article was published in *The Press* newspaper in New Zealand in 1863 (NZETC). What could give the inspiration to Butler 16 years before even the electricity being invented?

At first, books, magazines and researches were engaged with this topic and by time, machines and robots appeared on the TV screens as well.

The little Botlr – the above-mentioned new robot butler of the Californian Aloft Hotel – was resembled R2-D2 by the New York Times (Markoff 2014.) who is known as a character of the *Star Wars* movies from 1977. Markoff also mentions that he looks like "The Terminator's little sibling".

More than fifty years ago William Hanna and Joseph Barbera brought to the TV screens Rosie the robot maid (1962). She took care of the *Jetsons* and was the part of the family (IMDBa). She could also remind us to Botlr.

In the previous chapter we already met Dr Martin Smith's thoughts: "There is a potential risk that corrupt dictators create armies of killer robots". We already seen something similar in the TV in 1984: "Skynet" is a non-fiction but self-aware artificial system that was performed by war-machine cyborgs in the movie *The Terminator*.

These robots were built for the US army with the aim to remove the possibility of human errors and avoid the slow human reactions and creating an efficient response for the attack (IMDb). But Skynet gained self-awareness (artificial intelligence) and when the operators started panicking and wanted to deactivate the robots the Skynet received it as an attack, thus decided that the human race has to be destroyed. Ian Pearson also shares his concern in his report (2008): "We will need to make sure that no-one builds such as a machine before we have the related technology to link such intelligence to our own human brains so that machines can't gain a dangerous advantage." Supposedly he based his concern on a different intention than the impression of *The Terminator* movie.

Ian Pearson predicts colonies away from the Earth and Skyscanner also mentioned space travelling and commercial flights to the Mars... 2001: A Space Odyssey from 1968 (directed by Stanley Kubrick) describes a journey to the Jupiter. It takes place on a spaceship with several pilots and scientists and the ship's computer: HAL 9000 who had full control over the spaceship and "foolproof and incapable for error" (IMDb). It is unnecessary to mention that the happy end never came.

It is an interesting fact from 2011: when the Apple sued the Samsung because Apple thought that their iPad's design got stolen for the Samsung Galaxy Tab (Brown, 2011.) Then Samsung came with the defence that the idea of iPad was already stolen from the 2001: A Space Odyssey from 1968, as there is a clip in the movie when two astronauts are eating while using their personal tablet computers (rectangular shape with a big screen and narrow borders).

As it was mentioned earlier Big Jim was a robot cop. He is 220 kg heft and currently "works" in one of the Oregon police stations. He is equipped with rubber bullets, shotgun shells, tear gas, and video cameras that can convey to human backup whether the coast is clear. (Wired 2012.) We might remember one of the most popular movies in 1987 the Robocop. The terminally wounded Officer Alex J. Murphy will be the participant of the "Robocop" experiment and receives a cyborg-body around his human face. He will be a half-human half-

robot cop who will be responsible for maintaining the general well being and protect the innocents (IMDBd).

Inspector Gadget is a French-Canadian-American animated TV series from the year 1983 where – besides many gadgets – appeared the forerunner of the smart watch and today's tablet. Penny's computer book is capable to make connection with other computers and equipment and her watch was used for communication. (Go-Go Gadget 1997.)

James Bond was already mention above by the designer Tihany but he has to be mentioned again as his wristwatches are world famous. His LED Digital watch in 1973 was already equipped with magnet and four years later it could receive ticker-tape messages. In 1979 (*Moonraker*) there is a memory-bank calendar in his watch and also equipped with explosives and a remote control detonator. In the *For Your Eyes Only* in 1981 Bond's watch has already digital display and functioned as a walkie-talkie. In the movie *A view to kill* in (1985) the ring camera appears – another wearable technological achievement and the polarized sunglasses with headphones and music player. (Nagy 2012.)

My point with this chapter was to indicate that machines, robots, gadgets, the idea of space travel and the fear of the artificial intelligence are *not* the inventions of today's world but have been around us at least for a century now, mostly in Hollywood. However, slowly but surely one by one they seem to become real how we could see in the case of the smart watch for instance. The great question is what the origins are of the above-mentioned stories and how they are becoming real. Did Darwin and Samuel Butler already know what the future would bring how all the directors of great movies in the middle of the 20th century? Or today's scientists got the inspiration from them? Which came first, the chicken or the egg?

5 Conclusion

My aim with this research was to introduce the major impacts of the Internet and its applications furthermore the status of digital world from the hotel industry point of view. I found important to start my paper with a short introduction of the old-time technological inventions because a) we should always remember where we have been coming from and b) few of these inventions had similar impact on the society than the Internet nowadays.

The goal was not to present all the trends and technological products what existed or recently exist because trends could be temporary fads that are going to sink into oblivion within months. However there are few of the achievements what seem to be more than fads and slowly but surely becoming accepted tools of everyday life. Technology-Based Self-Service kiosks show a permanent trend in the hotel industry, they make the check-in process simple and timesaving. Today's customer demand is a) being self-sufficient which is easily manageable via technology and b) employees should be available in the case it is needed. Hotel guests expect "home experience" far away from their home in a hotel room equipped with Interactive Mobile – and Guest Empowerment Technologies, thus customers are enable to gratify their independency and playfulness. But we should not forget that these are just objects which are easily available for everyone, but creating a sustainable competitive advantage is not possible as gradually all the organization will purchase the particular devices. "What you can win is you and your personnel".

Social media is one of the accompanied elements of the Internet and within a short timeframe it made a significant impact on the society in general as well as became a powerful tool in the business life. Besides journals and articles I experienced how the theory works in practice, as during my two-month internship at the Sales and Marketing Department of Swissôtel Tallinn.

A new Restel Hotel opens its gate in Helsinki at the beginning of 2015. As an outcome of several meetings with Mr Gábor Pusztai, the Director of Operations of the Restel OY in the Helsinki area, I received many information about the newcomer Hotel Indigo Boulevardi and with his contribution I was able to forward a survey that was composed to the Helsinki Restel Hotel's General Managers asking about their experiences and opinions about the digital technology's effect on the hotel industry and what they expect from the future.

On a 1-10 scale the GMs evaluated eleven statements related to the future technology improvements, trends, communication and personal connection in this digital world as well it covered the uncertainty of the automated future. The graphs clearly show that Helsinki GMs do not really think that the future is predictable, because trends come and go, and the predictability depends on the economical circumstances. They all agree that the technology plays a very important role for the hotel guests and the technological facilities highly influence the potential guests in making decision when they are about to book a hotel room. They did not show concern about the poorer communication that might be caused by the digital technology, which is understandable as Kemmons Wilson already established the principles of the IHG's direct approach for the interest of the effective communication which model is still imitated by other units in the hotel industry.

There is no device (yet) what tells the future but there are certain components that could give the direction. Many articles predict that by 2017 more than three billion people will have Internet access in 24/7. According to Skyscanner the 'Big Friendly Data' will contains all the personal information which have been gathered during the years via social media and other Internet sites and going to be utilized to create tailor-made offers; the system will know everything, there will be no secrets to hide...Wearable technologies will belong to the everyday life – constantly being connected to the Internet and these devices will understand our individual preferences based on the previous online experiences.

The quote of the Wired Magazine has been following through my research, concerning about the fact that by the end of this century 70% of today's occupation will be automated by robots. Robotic technology is not a new phenomenon; it started in the 1950's and it has been developing in the last sixty years. By now, they are being used in transportation, agriculture, space travel and many other areas. Robotic technology will have a deep influence on the manufacturing; robots already replaced human roles, therefore people are losing their jobs – as it could be seen – they are easily substituted. However, if robots will receive artificial intelligence, it could mean the beginning of something unpredictable and something very bizarre...

I think that this paper gives an overall picture about the problem what the Internet and the digital technology have caused and could cause in the future as well as gives a long list about the benefits. However, I see many opportunities for further research such as a deeper examination of the current digital generation (the Apple generation), the habits and behaviour of the Millennials at different parts of the world.

I also find important the observation of the digital world as digital technology and trends are constantly changing and being up-to-date is an essential element of the business life. The potential findings could give inspiration for further researches.

Making further investigations about the future? The opportunities are unlimited. I found as a challenge to investigate more about the future hospitality, what the future of the recently predicted two main destinations, the underwater hotels and the space would be.

Contacting futurologists and comparing their forecasts would be another exciting research idea. Knowing more about the robot technology and the artificial intelligence, moreover these impacts on the society and the hotel industry would give the possibility for further investigations, too, as everybody is curious... what the future will bring.

Bibliography

4Hoteliers, 2014. Featured Product. URL: <http://www.4hoteliers.com/news/story/13065>. Accessed: 4 September 2014.

Bagley E. & Lanz, L. 2014. Preparing Your Hospitality Executives & Staff for Effective Corporate Communication: Preparedness versus Damage Control. HVS Marketing & Communication. USA.

BBC News, 2014. Evernote: wearable technology to go mainstream. URL: <http://www.bbc.com/news/29357048>. Accessed: 11 November 2014.

Beatson, A., Lee, N. & Coote L. V. 2007. Self-Service Technology and the Service Encounter. *The Service Industries Journal*, 27, 1, pp. 75–89.

Björqvist, A. January 2014. Concept-based Product Development. Haaga-Helia University of Applied Sciences. Presentation. Helsinki.

Brown, M. 2011. Samsung cites ‘2001: Space Odyssey’ as prior art in iPad patent battle. *Wired Magazine*. URL: <http://www.wired.co.uk/news/archive/2011-08/24/samsung-2001-prior-art>. Accessed: 8 November 2014.

Bulchand-Gidumal, J., Melián-González S. & González López-Valcárcel, B. 2011. Improving hotel ratings by offering free Wi-Fi. *Journal of Hospitality and Tourism Technology*, 2, 3, pp. 235-246.

Burchat, K. 2013. Social Media: changing communication forever. *The Argus*. URL: <http://www.theargus.ca/index.php/archives/11989>. Accessed: 9 September 2014.

Business Insider, 2014. Why Companies Need To Do A Better Job Of Trusting Their Employees. URL: <http://www.businessinsider.com/sc/how-companies-can-lead-in-the-digital-world-2014-9>. Accessed: 10 November 2014.

Butler, S. 1914. *Darwin Among the Machines. A First Year in Canterbury Settlements With Other Early Essays*, A. C. Fifield. London.

Celebrity Speakers Association, Dr Ian Pearson, URL: http://www.speakers.co.uk/our-speakers/profile/ian_pearson. Accessed: 8 August 2014.

Chen, W. C. 2011. Technology Base Self Service. Dissertation. University of Nevada. Las Vegas.

Chopra, K. 2013. The Effects of Social Media on How We Speak and Write. Social Media Today. URL: <http://www.socialmediatoday.com/content/effects-social-media-how-we-speak-and-write>. Accessed: 9 September 2014.

Coates-Conroy, J. 2008. Self-Check-In Security. Airport Technology. URL: <http://www.airport-technology.com/features/feature1510/>. Accessed: 17 September 2014.

Coldwell, W. 2014. The Future of travel: what will holidays look like in 2024? The Guardian. URL: <http://www.theguardian.com/travel/2014/sep/29/predicting-future-of-travel-holidays>. Accessed: 15 October 2014.

Collins, A. 2008. Technology in the next 100 years: the futurologist's view. Computer Weekly. URL: <http://www.computerweekly.com/opinion/Technology-in-the-next-100-years-the-futurologists-view>. Accessed: 17 July 2014.

Computer Hope, URL: <http://www.computerhope.com/issues/ch000984.htm>. Accessed: 14 September 2014.

Devitt, J. 2012. Einstein feared technology's effects...why don't we? The Revelstoke Current. URL: <http://www.revelstokecurrent.com/2012/11/16/einstein-feared-technologys-effects-why-dont-we/>. Accessed: 8 November 2014.

Doyle, A. 2014. The Hotel of the Future. Successful Meetings. URL: <http://www.successfulmeetings.com/strategy/technology-solutions/the-hotel-of-the-future/>. Accessed: 28 October 2014.

Eleven Wireless, 2013. 6 Guest & Hotel Driven Trends. URL: <http://www.elevenwireless.com/6-guest-hotel-driven-trends/>. Accessed: 18 September 2014.

Enriquez, J. 2001. As the Future catches you – How Genomics & other forces are changing your life, work, health & wealth. Crown Business, New York, pp. 163-175.

Fennel, Z. What Are the Positive Impacts of Communication Technology. URL: http://www.ehow.com/facts_6178290_positive-impacts-communication-technology_.html. Accessed: 9 September 2014.

Go-go Gadgets, 1983. The Original Inspector Gadget Fun Site. URL: <http://inspector-gadget.net/inspector-gadget-1983-series>. Accessed: 2 November 2014.

Gonzalo, F. 2013. Online Resources Key to Travel Decision-making [Infographic]. URL: <http://fredericgonzalo.com/en/2013/03/16/online-resources-key-to-travel-decision-making-infographic/>. Accessed: 12 September 2014.

Graham, G. 2014. Robots will take over middle class professions – says minister. The Telegraph. URL: <http://www.telegraph.co.uk/technology/10952317/Robots-will-take-over-middle-class-professions-University-Minister-says.html>. Accessed: 12 November 2014.

Gruber, T. 2011. I want to believe they really care. Journal of Service Management, 22, 1, pp. 85 – 110.

Hansen, E. L. & Owen, R. M. 1995. Evolving Technologies To Drive Competitive Advantage in Hospitality Industry. Hotel Online. URL: <http://www.hotelonline.com/Trends/Andersen/tech.html>. Accessed: 19 August 2014.

HEDNA, Hotel Electronic Distribution Network Association. URL: http://www.hedna.org/?page=About_AboutHEDNA. Accessed: 7 September 2014.

Higley, J. 2013. A history lesson. Hotel News Now. URL: <http://www.hotelnewsnow.com/Article/11113/A-history-lesson-in-hotels>. Accessed: 5 September 2014.

IHG, 2014. International Hotel Group Mobile Application, Accessed: 3 September 2014.

IMDb a, The Jetsons, 1962-1988. American-Canadian sitcom. Hannah, W. & Barbera, J.
URL: <http://www.imdb.com/title/tt0055683/>. Accessed: 2 November 2014.

IMDb b, The Terminator, 1984. English-American movie. Cameron, J.
URL: <http://www.imdb.com/title/tt0088247/plotsummary>. Accessed: 2 November 2014.

IMDb c, 2001: A Space Odyssey. American-English movie. Kubrick, S.
URL: <http://www.imdb.com/title/tt0062622/>. Accessed: 2 November 2014.

IMDb d, RoboCop, 1987. American movie. Verhoeven, P.
URL: http://www.imdb.com/title/tt0093870/?ref_=fn_al_tt_2. Accessed: 2 November 2014.

Incentive Travel and Corporate Meetings (ITCM), 2014. Hotel of Future's survey reveals that more and more guests want to innovative technology in hotels,
URL: <http://www.incentivetravel.co.uk/news/hotel/22471-hrs-hotel-of-the-future-survey-reveals-that-more-and-more-guests-want-innovative-technology-in-hotels>.
Accessed: 28 October 2014.

ITViz Multimedia, 2013. How does social media affect the way we communicate. URL:
<http://itviz.com/2013/06/how-does-social-media-affect-the-way-we-communicate/>.
Accessed: 16 September 2014.

Kang, D. 2013. The Impact of The Telephone on Society. Research Project. URL:
[http://educ.ubc.ca/courses/etec540/Sept04/kangd/Researchproject/inventionoftelephone.h](http://educ.ubc.ca/courses/etec540/Sept04/kangd/Researchproject/inventionoftelephone.htm)
tm. Accessed: 14 September 2014.

Kang, J. 2011. Social media marketing in the hospitality industry: The role of benefits in increasing brand community participation and the impact of participation on consumer trust and commitment toward hotel and restaurant brands. Report, ProQuest LLC. Iowa.

Kante, S. 2014. New technologies that changed our life.
URL: <http://digitalpresent.myblog.arts.ac.uk/2014/01/07/technologies-that-changed-our-lives/>. Accessed: 18 September 2014.

Kasavana, M. L., Nusair, K. & Teodosic, K. 2010. Online social networking: redefining the human web. *Journal of Hospitality and Tourism Technology*, 1, 1, pp. 68-82.

Kelly, K. 2013. Robots are coming to take our jobs. We should be happy about it. *Wired Magazine*. I/2013, pp. 71-83.

Kelly, H. 2014. Helping “smart” devices talking each other. CNN. URL: <http://www.cnn.com/2014/03/28/tech/innovation/smart-device-communication/>. Accessed: 2 December 2014.

Kreis, S. 2012. The Printing Press. Lectures on Modern European Intellectual History. The History Guide, URL: <http://www.historyguide.org/intellect/press.html>. Accessed: 4 September 2014.

Leviton, 2013. Smart Me Building Technologies. Brochure. Budapest.

Lilkty, 2010. Top 10 countries that Censor the Internet. ListVerse. URL: <http://listverse.com/2010/10/02/top-10-countries-that-censor-the-internet/>. Accessed: 18 September 2014.

Markoff, J. 2014. 'Beep', Says the Bellhop. Aloft Hotel to Begin Testing 'Botlr,' a Robotic Bellhop. *The New York Times*. URL: http://www.nytimes.com/2014/08/12/technology/hotel-to-begin-testing-botlr-a-robotic-bellhop.html?_r=0. Accessed: 2 September 2014.

Martin, C. 2014. What is smartwatch? Wearable technology explained. PC Advisor. URL: <http://www.pcadvisor.co.uk/buying-advice/gadget/3498629/what-is-smartwatch/>. Accessed: 8 November 2014.

McLeod, S. 2008. Likert Scale. Simply Psychology. URL: <http://www.simplypsychology.org/likert-scale.html>. Accessed: 2 December 2014.

Meuter, M. L., Ostrom, A. L., Bitner, M. J. & Roundtree, R. 2003. The influence of technology anxiety on consumer use and experiences with self-service technologies. *Journal of Business Research*, 56, pp. 899– 906.

Moore, A. & Stone, J. 2013. Social media in 2013: the influence and impact of the individual on digital communications. McBee Strategic. URL: <http://www.mcbeestrategic.com/social-media-in-2013-the-influence-and-impact-of-the-individual-on-digital-communications/>. Accessed: 10 November 2014.

Nagy, A. 2012. 10 James Bond Gadgets That Actually Exist – And One That Needs To. Gizmodo. URL: <http://gizmodo.com/5966242/10-james-bond-gadgets-that-actually-exist-and-one-that-needs-to>. Accessed: 8 October 2014.

News.com, 2012. World Travel, The Hotel Room that is a Giant Tablet. URL: <http://www.news.com.au/travel/world-travel/the-hotel-room-that-is-a-giant-tablet/story-e6frfqai-1226572344482>. Accessed: 28 February 2014.

Oxford Dictionary, 2013. URL: <http://blog.oxforddictionaries.com/august-2013-update/>. Accessed: 4 September 2014.

Pearson, I. 2007. The future of women in business. Report. URL: <http://www.futurizon.com/wp-content/uploads/2013/05/womeninbusinessapr07.pdf>. Accessed: 13 July 2014.

Pearson, I. 2008. The Next 100 Years. A Futurizon Report. URL: <http://www.futurizon.com/wp-content/uploads/2013/05/next100years.pdf>. Accessed: 13 July 2014.

Pearson, I. 2010. The future of Facebook. A Futurizon Report. URL: <http://www.futurizon.com/wp-content/uploads/2013/05/facebook.pdf>. Accessed: 13 July 2014.

Pearson, I. 2011. The 2030 Future of Sleep Report. Travelodge. URL: <http://rss.hsyndicate.com/file/152004621.pdf>. Accessed: 13 July 2014.

Pearson, I. Futurizon, About Futurology, Dr Ian Pearson BSc DSc(hc) CITP FBCS FWAAS FWIF FRSA, Futurologist, URL: <http://www.futurizon.com/ian-pearson/>. Accessed: 27 July 2014.

- Phelan, K. V., Chen H. T. & Haney, M. 2013. "Like" and "Check-in": how hotels utilize Facebook as an effective marketing tool. *Journal of Hospitality and Tourism Technology*, 4, 2, pp. 134-154.
- Phillips, D. 2002. Technology and the Human Touch. Hotel Online. URL: http://www.hotel-online.com/News/PR2002_1st/Feb02_HumanTouch.html. Accessed: 28 August 2014.
- Poh, M. 2013. 20 Dictionary Words That Originated From The Internet. Hongkiat. URL: <http://www.hongkiat.com/blog/dictionary-words-from-internet/>. Accessed: 4 September 2014.
- Pusztai, G. 2014. About the Hotel Indigo Helsinki Boulevard. Interviews. Director of Operations, Restel Oy.
- Reinders, M. J., Dabholkar, P. A. & Frambach, R. T. 2008. Consequences of Forcing Consumers to Use Technology-Based Self-Service. *Journal of Service Research*, 11, 2, pp. 107-123.
- Restel Oy, URL: http://www.restel.fi/restel/en_GB/. Accessed: 5 August 2014.
- Restel, 2013. Restel Hotel Group to open a new hotel on Bulevardi in Helsinki, URL: http://www.restel.fi/ajankohtaista/en_GB/restel-bulevardi-eng/. Accessed: 25 July 2014.
- Riesselman, J. 2011. Hotel booking history shapes future planning. *Hotel News Now*. URL: <http://www.hotelnewsnow.com/Article/5333/Hotel-booking-history-shapes-future-planning>. Accessed: 16 September 2014.
- Schrier, T., Erdem, M. & Brewer, P. 2010. Merging task – technology fit and technology acceptance models to assess guest empowerment technology usage in hotels. *Journal of Hospitality and Tourism Technology*, 1, 3, pp. 201-217.
- Schwartz, D. 2014. Technology and a 'Generation of Idiots'. *Viral Global News*. URL: <http://www.viralglobalnews.com/feature-stories/technology-generation-idiots/9402/>. Accessed: 10 November 2014.

Shore, M. 2014. Robot Room Service – Here's a tip, there is just no benefit. URL: <http://www.matshore.com/2014/08/21/robot-room-service-heres-a-tip-there-is-just-no-benefit-2/>. Accessed: 4 September 2014.

Singh, S. 2012. New Mega Trends. Implication for our Future Lives. Palgrave MacMillan, UK, pp. 81-110.

Skyscanner, 2014. The Future of Travel Report. URL: <http://www.skyscanner2024.com/>. Accessed: 10 October 2014.

Smith, M. 2014. Which jobs will see robots doing in the future? The Telegraph. URL: <http://www.telegraph.co.uk/technology/news/10805058/Which-jobs-will-we-see-robots-doing-in-the-future.html>. Accessed: 17 August 2014.

Social Daily, 2010. 15 éves az Internet Magyarországon [The Internet is 15 years old in Hungary] URL: <http://hu.socialdaily.com/articles/287-15-eves-az-internet-magyarorszagon>. Accessed: 18 September 2014.

Stoessel, E. 2014. 5 Answers To Your Social Media Questions. Restaurant Hospitality, 98, 2, pp. 30-34.

Swider, M. 2014. Goolge Glass Review. Explorer Edition upgrades to 2GB of RAM in the US and UK, Is it worth the price now? Tech Radar. URL: <http://www.techradar.com/reviews/gadgets/google-glass-1152283/review>. Accessed: 10 November 2014.

The Guardian, 2014. Smartwatches make up only 11% of wearable market, figures show. URL: <http://www.theguardian.com/technology/2014/oct/23/wearables-tv-track-fitness>. Accessed: 10 November 2014.

The Telegraph, 2012. Facebook and Twitter 'more addictive than tobacco and alcohol'. URL: <http://www.telegraph.co.uk/technology/news/9054243/Facebook-and-Twitter-more-addictive-than-tobacco-and-alcohol.html>. Accessed: 12 September 2014.

- Tihany, A. 2011. Hotel Room of the Future. Departures. URL:
<http://www.departures.com/lifestyle/technology-gadgets/hotel-room-future>.
Accessed: 18 October 2014.
- Turner, S. A. 2014. Keycard 'revolution' at Hilton's front door. Hotel News Now. URL:
<http://www.hotelnewsnow.com/Article/14145/Keycard-revolution-at-Hiltons-front-door>.
Accessed: 16 September 2014.
- Wired, 2012. Robots are already replacing us. Wired Magazine, URL:
<http://www.wired.com/2012/12/ff-robots-are-already-replacing-us/all/>.
Accessed: 10 October 2014.
- World Travel Market, 2014. Tablets and Smartphones to Drive Next Phase of Online Travel Growth. WTM Vision Rimini Delegates Discover. URL:
<http://www.wtmlondon.com/press/Tablets-and-Smartphones-to-Drive-Next-Phase-of-Online-Travel-Growth-WTM-Vision-Rimini-Delegates-Discover>. Accessed: 15 October 2014.
- You Tube, 2013. Reggie Middleton Revolutionizes the Hospitality Industry with Google Glass. URL: https://www.youtube.com/watch?v=SlzYyc_GA1U.
Accessed: 10 November 2014.
- Wang, Y. C., & Fesenmaier, D. 2004. Towards understanding members' general participation in and active contribution to an online travel community. *Tourism Management*, 25,6, pp. 709-722.
- Zhu, W. W. & Morsan, C. 2014. An empirical examination of guests' adoption of interactive mobile technologies in hotels. Revisiting cognitive absorption, playfulness, and security. *Journal of Hospitality and Tourism Technology*, 5,1, pp. 78 – 94.